

Distributive Property

When you see this in a problem $3(4)$ you will recognize it as 3 multiplied by 4

$$\therefore 3(4) = 12$$

When you see this in a problem $3(4 + 2x)$ the same rules apply, 3 multiplied by 4 and

3 multiplied by $2x$

$$3(4 + 2x)$$

$$\therefore 12 + 6x$$

note it is important to multiply everything inside the parenthesis by the number and/or sign outside of it.

$$-3(4 - 3y)$$

$$\therefore -12 + 9y$$

* look at how the
 ← Sign outside the parenthesis
 changes the signs inside
 when you multiply.

Distributive Property Cont'd

If you notice a negative sign outside of the Parenthesis you can think of it as -1

example $-1(4 + 3x)$

$$-4 - 3x$$

* notice how the signs change.

example.

$$-(3 - 4x)$$

$$-1(3 - 4x)$$

$$-1(3 - 4x)$$

$$-3 + 4x$$

* Pay attention to the signs *